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10/829,560	04/22/2004	William Kenneth House	FORM-0004	6354

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EXAMINER

KENNY, DANIEL J

ART UNIT PAPER NUMBER

3637

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/829,560	Applicant(s) HOUSE ET AL.	
	Examiner Dan Kenny	Art Unit 3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/5/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information contained in the information disclosure statement (IDS) submitted on 8/5/2004 was considered by the examiner.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference number 84 is not in the figures as disclosed on page 7, line 10. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Reference number 80, shown in Fig. 5, is not in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the

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specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 6, 7, and 12-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to describe the claimed lever points in such a way as to enable one skilled in the art to make and/or use the flexible butt block invention, as exemplified by the following portions of the specification:

At page 7, line 27, and page 8, lines 1-3, and again at page 8, lines 3-5, the specification recites a 65 PSI force being created at two locations, without any indication of where the forces are acting. Are the forces located on (or in) the drywall, the butt block, or the screws? The magnitude and the location of a force must be known in order to gain a meaningful understanding of a body or system. In addition to these few lines from the specification providing no answer to these questions, the location of the forces cannot be deduced based on reading the remaining portion of the specification. Without this fundamental understanding of the location of the applied forces, one skilled in the art is unable to make and/or use a flexible butt block including the critical, claimed lever points. At page 8, lines 5-6, another force, this force apparently greater than the 65 PSI force, is discussed. The specification recites that this greater force "is created at lever points 155 and 153". What component, if any, is under load as a result of this force? Is it the drywall, the butt block, or both? This sentence further states that the leg portions "follow the upward recess". What does this mean? Part of the confusion is caused because nowhere in the discussion of the flexible butt block embodiment of the invention is a recess or upward recess given a corresponding drawing reference number. However, even if there were such a reference number, it would be unclear to one skilled in the art, what is meant by the legs "following" this recess.

On page 8, lines 7-10, the statement is made that the lever points, which are a critical, claimed element, are designed to be more flexible than the central axis. However, there is no detail anywhere in the specification explaining what makes the lever points more flexible than the central axis, or even why this flexibility is beneficial.

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In addition, one skilled in the art would not normally understand a “point”, or an “axis”, which can be likened to a point, to have the property of flexibility.

One skilled in the art could not discern by reading the whole specification, how the “rounded portions” assist in the “lever action” as stated on page 8, line 10. Nor could such a skilled artisan understand how the rounded portions “provide clearance during the attachment of flexible butt block”; clearance between what surfaces of which elements? In any case, this “clearance” function served by the rounded portions is apparently not related to the critical, claimed “lever point” element. More importantly, the bare conclusion that the “rounded portions” assist in the critical “lever action”, without an accompanying express or implied substantiation as to how the conclusion is derived, would leave one skilled in the art unable to make and/or use the invention.

The sentence starting at page 8, line 11, and ending at line 15 is incomprehensible. Specifically, the sentence begins to lose any meaning starting with portion of the sentence, “or until a force...”.

The recitation on page 8, lines 18 to 24 is simply a grouping of random, apparently unrelated, test results that do not help to enable one skilled in the art to make or use the invention.

Page 9, lines 3-10 attempts to define a number of angles. However, one skilled in the art would not be able to understand what angle is defined by, for example, “the angle measured from central axis 156 to the surface of flexible butt block 140 between central axis 156 and lever point 153 is roughly 3.5°”; in fact, it appears that an angle so

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formed, between an axis and a line formed by two points, one point being the axis itself, would be 0° , not 3.5° .

Applicant sets forth on page 9, lines 11-15, that attaching the drywall to the butt block via the two sets of drywall screws closest to the drywall butt interface "causes force to be applied via the action of lever points 153 and 155..."; where is this force applied?; and, how do the lever points assist in application of this force? This information, even considered in light of the entirety of the specification, neither explicitly or implicitly, would enable one skilled in the art to make and/or use the invention.

On page 9, lines 22-24, a conclusion is reached regarding how the critical lever action provides the benefit of securing the drywall to the butt block, and creating a well defined recess, there being no detail in the sentence or in the rest of the specification, as to how the lever action provides such a benefit.

The preceding serves to show that claims 6, 7, and 12-15 contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "a first sheet of drywall" in line 4. There is insufficient antecedent basis for this limitation in the claim, as a first sheet of drywall has been previously recited in line 2 of the claim. In addition, Claim 8 recites the limitation "a second sheet of drywall" in line 4. There is insufficient antecedent basis for this limitation in the claim, as a second sheet of drywall has been previously recited in line 2.

Claims 14 and 15 are rejected because, since claim 12 recites first an second lever points, it is unclear which "lever point" is recited in claims 14 and 15.

Appropriate corrections must be made.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Utzman (1,967,846).

Claim 1 – Utzman discloses a method of making a drywall joint, comprising steps of: (a) positioning a flexible butt block (3, 18, 18, 19, 19) that has a recessed surface (rs) on an interior side of a joint that is to be formed between a first drywall sheet (2) and a second drywall sheet (2), wherein said flexible butt block has a leg portion (18) and a lever point (lev); (b) securing at least one of the first and second drywall sheets to the flexible butt block so that the secured sheet is made to conform in shape to the recessed surface, thereby forming a secondary recess on an exterior of the drywall sheet in the area at which the joint is to be made (note that, although Fig. 6 does not

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show nails (6), page 2, lines 48-105 disclose that nails are used in the same manner as in Fig. 4, Figs. 4 and 6 both representing means to positively allow compression on the side of the drywall engaged by the support); and (c) applying joint compound within the secondary recess (Fig. 1, page 1, lines 20-40, and page 2, lines 32-47).

Claim 2 – Utzman discloses the claimed method, wherein the flexible butt block has first (18) and second (18) leg portions wherein step (b) is further performed by securing both the first and second sheets to the recessed surface, whereby the secondary recess is formed on an exterior of both of the drywall sheets in the area at which the joint is to be made (Fig. 1, Fig. 6, and page 2, lines 40-47).

Claim 3 - Utzman discloses the claimed method, wherein step (b) is further performed by securing first portions (fp, see annotated Fig. 4 below) of the respective sheets respectively to the first and second leg portion, and then securing second portions (sp, see annotated Fig. 4 below) of the sheets, which are closer to the area at which the joint is to be made than the first portions, to the flexible butt block, thereby gradually pulling the sheets against the recessed surface to form the secondary recess (page 2, lines 40-47).

Claim 4 - Utzman discloses the claimed method, wherein step (b) is further performed by securing (securing via the set of nails (6) furthest from the butt joint) a first portion of the sheet to be secured to the leg portion, and then securing (securing via the

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set of nails (6) closest to butt joint) a second portion of the sheet to the flexible butt block that is closer to the area at which the joint is to be made than the first portion, thereby gradually pulling the sheet against the recessed surface to form the secondary recess.

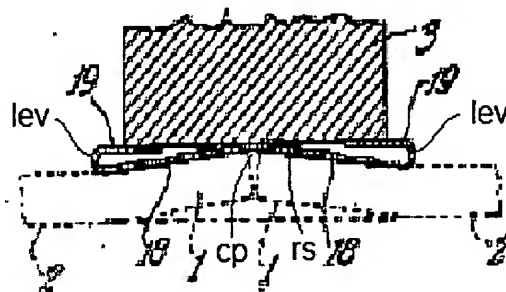
Claim 5 - Utzman discloses the claimed method, wherein step (c) is performed so as to complete a joint that is substantially planar on an exterior surface thereof (page 1, lines 34-37).

Claim 6 - Utzman discloses the claimed method, wherein said lever point is more flexible than a center portion (cp) of said flexible butt block (the lever point is considered more flexible than the center point because, "flexible" is defined as: able to bend easy (online dictionary, wordnet.princeton.edu/perl/webwn), and the load applied by the bottom of the support (3) to either one side edge (19) or the other side edge (19) during the fastener installation would cause a significant bending load at the lever point by virtue of the relatively high degree of movement of the side edge during such loading as a result of the lack of support offered by the free end of the side edge. Such a bending load at the center point caused by such installation loads being significantly greater than the bending load at the center point by virtue of the center points central location between the two legs and the two side edges, such central location minimizing bending loading at the center point because of the tendency, during installation loading, for the

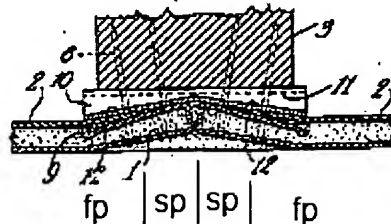
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bottom of the support to apply the load to either one side edge or the other, thus leaving the central point relatively free from the effect of a significant imposed bending load).

Claim 7 - Utzman discloses the claimed method, wherein said lever point is more flexible than a leg portion of said flexible butt block (in light of the above definition of "flexible", said lever point is considered more flexible than a leg portion of said flexible butt block because the unsupported, free end of the side edge would cause a significantly higher bending load to be induced during installation loading of the butt block at the lever point as compared to the essentially non-existent bending load, and therefore flexure or flexibility based on the above definition, that would exist at any location on or in the free-to-move, unrestrained leg portion).



Annotated Fig. 6 (U.S. Pat. 1,967,846)



Annotated Fig. 4 (U.S. Pat. 1,967,846)

Claims 8-10 and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Trout (6,807,781).

Claim 8 - Trout discloses a flexible butt block (10) for forming a drywall joint, comprising: a first surface (fs, surface between point lp1 and butt end 77) for engaging a first sheet of drywall (71); a second surface (ss, surface between point lp2 and butt end 79) for engaging a second sheet of drywall (73); a first leg portion (raised portion, 52) located at a first distal end of said flexible butt block for engaging the first sheet of drywall; a second leg portion (raised portion, 58) located at a second distal end of said flexible butt block for engaging a second sheet of drywall.

Claim 9 – Trout discloses the claimed flexible butt block, further comprising; recess defining means (50) for defining a recessed area between said first and second surfaces, said recess defining means being constructed and arranged to be drawn into contact with butt edge areas of the first and second sheets of drywall when fully secured to said sheets of drywall, whereby the butt edge areas will be caused to form a concave secondary recess on an exterior surface of the drywall joint (col. 4, line 62 to col. 5, line 50).

Claim 10 – Trout discloses the claimed flexible butt block, wherein said butt block is fabricated from a material that may be penetrated by a drywall screw and that will provide sufficient anchoring for the drywall screw for the drywall screw to be able to

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pull a butt edge area of a sheet of drywall against the recessed area (col. 4, lines 14-16, and col. 4, lines 36-40).

Claim 12 - Trout discloses the claimed flexible butt block, further comprising a first lever point (lp1, point adjacent fastener 44) located between said first surface and said first leg portion and a second lever point (lp2, point adjacent fastener 44) located between said second surface and said second leg portion.

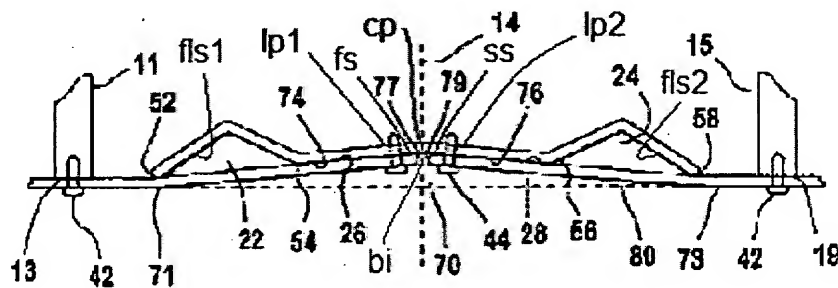
Claim 13 - Trout discloses the claimed flexible butt block, wherein said first and second leg portions have a rounded edge (16, 18, respectively).

Claim 14 - Trout discloses the claimed flexible butt block, wherein said lever point is more flexible than a center portion (cp) of said flexible butt block. The lever point is considered more flexible than the center portion because, "flexible" is defined as: able to bend easy (online dictionary, wordnet.princeton.edu/perl/webwn), and after the Trout butt block is fully installed, the center portion is somewhat restrained from flexing due to the increased rigidity of the butt block/drywall assembly as a result of the fasteners (44) securing the drywall tightly against the first and second surfaces. The lever point, however, is not so restrained. In fact, due to the location of the lever point directly adjacent the fastener, any movement of any portion of the butt block between the rounded edge and the lever point would inevitably cause bending at the lever point.

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Claim 15 - Trout discloses the claimed flexible butt block, wherein said lever point is more flexible than a leg portion of said flexible butt block. As described above, the lever point is the point of maximum bending due to its direct proximity to the fastener.

Claim 16 - Trout discloses the claimed flexible butt block, wherein said first and second leg portions have a substantially flat lower surface (fls1 and fls2, respectively).



Annotated Fig. 4 (6,807,781)

Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Trout.

Claims 17-19 - Trout discloses a drywall joint, comprising: a first sheet of drywall (71) having a first butt edge (77); a second sheet of drywall (73) having a second butt edge (79), said first and second sheets of drywall being positioned so that said first butt edge is adjacent to said second butt edge at a butt interface (bi); recess forming means (50) engaging said first and second sheets for pulling said first and second butt edges towards first (52) and second (58) leg portions and first (22) and second (24) surfaces located on a flexible butt block (10) so as to define a secondary recess (70) in exterior

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surfaces of the first and second sheets in the area of the butt interface; and a sealant (plaster, col. 6, line 47) comprising a solidified joint compound is applied in said secondary recess, wherein said sealant is applied so that an outer surface of said sealant is positioned substantially within a common plane with exterior surfaces of said first and second sheets of drywall that are not affected by said recess forming means (col. 6, lines 47-49).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trout.

Claim 11 - Trout discloses the claimed flexible butt block except that Trout does not expressly disclose the flexible butt block being fabricated from a material comprising fiberglass.

However, Trout does disclose the flexible butt block being fabricated from "any other suitable rigid material such as aluminum, or plastic, etc." Since fiber reinforced plastics (fiberglass) are known, the examiner points out that fiber reinforced plastic would be encompassed by Trout's teaching of "plastics, etc.". It would have been obvious to one having ordinary skill in the art at the time the invention was made to use fiber reinforced plastic for Trout, because fiber reinforced plastic will is easy to form, and stronger than other materials such as metal or wood.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Klammer (6,108,990, Peterson et al. (5,657,599), Paoletti (3,675,383), and Talbacka (US 2003/0136067) all disclose drywall butt joint backer structures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Kenny whose telephone number is (571) 272-9951. The examiner can normally be reached on Monday thru Friday, 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lana Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DK D.K.

11/20/2006

LANNA MAI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

A handwritten signature in black ink, appearing to read "Lanna Mai", written in a cursive style.